

FIRE BEHAVIOR FORECAST

FORECAST NUMBER:	TYPE OF INCIDENT: Wildland Fire
NAME: East Zone Forecast	OPERATIONAL PERIOD: August 17 & 18, 2000
DATE ISSUED: August 16, 2000	TIME ISSUED: 1700
UNIT: Texas Forest Service	ISSUED BY: Tom Spencer

This product is a summary of weather and fuel conditions, combined to produce an assessment of fire behavior potential for the entire East Texas Zone. The primary intent of the product is to assist wildland firefighters with the fire order: **"Initiate all action based on current and expected fire behavior."** Fire suppression personnel should use their knowledge of local fuels and topography, in combination with the fire weather forecast to determine site specific fire behavior.

INPUTS

WEATHER SUMMARY via NWS Fire Weather Forecasts: **FOR NORTHEAST TEXAS** – HOT & DRY WEATHER WILL CONTINUE ACROSS ALL OF NORTHEAST TEXAS THROUGH THE END OF THE WEEK. DRIER AFTERNOON RH's WILL ALSO BE FELT. EXPECT MOSTLY SUNNY SKIES, MAX TEMPS AT OR ABOVE 100, WINDS SW @ 5-10, MIN RH 25 - 30%. NO MOISTURE RECOVERY AT NIGHT. **FOR SOUTHEAST TEXAS** – A RIDGE OF HIGH PRESSURE WILL WORK TO KEEP SOUTHEAST TEXAS HOT AND MOSTLY DRY WITH LESS THAN A 20% CHANCE OF PM THUNDERSTORMS. EXPECT PTCLDY TO MOSTLY SUNNY SKIES, MAX TEMP IN MID TO UPPER 90'S, WINDS S @ 5 – 10, & MIN RH – LOWER 30's%, WITH GOOD RECOVERY AT NIGHT.

OUTPUTS

FIRE BEHAVIOR

GENERAL: Expect fire risk potential to be in the extreme range across the entire Zone. The large fuels are critically dry. Also, live fuel moistures are approaching critically low levels. With the moderate winds, and low RH's forecasted, **expect fires to be primarily fuel driven, with multiple heads possible.** With winds, (especially near a thunderstorm) look out for rapid rates of spread for fires burning in the grasses, with downwind spotting. Difficulty of control will be high on fires burning in all type fuels, requiring line construction to insure successful control. Use of aerial resources is recommended on fires where structures are threatened, and on fires in heavy fuels. Fires starting late can be expected to exhibit active behavior on into the night time hours. **Potential for large fire development is increasing. Expect all fires to burn hot and be hard to control!**

SPECIFIC:

Northeast Texas –

Fire Behavior Outputs				Probability of Ignition	
	Grass	Plantation	Cut-Over	Sun	Clouds
Rate of Spread	80 chs/hr	65 chs/hr	10 chs/hr	80%	70%
Flame Lengths	4 - 6 feet	18 - 20 feet	8 - 10 feet		

Expect spotting to occur in all type fuels, & and torching in the plantations and timber types during peak burning conditions from 1100 – 1900 hours.

Southeast Texas -

Fire Behavior Outputs				Probability of Ignition	
	Grass	Plantation	Cut-Over	Sun	Clouds
Rate of Spread	70 chs/hr	44 chs/hr	9 chs/hr	70%	60%
Flame Lengths	4 - 6 feet	15 - 20 feet	7 - 9 feet		

Expect spotting to occur in all type fuels, & and torching in the plantations and timber types during peak burning conditions from 1200 – 1900 hours.

AIR OPERATIONS: Winds are forecasted to be generally mild in the 10 mph range. Don't anticipate any operational cautions, except if operating in the vicinity of a thunderstorm. Watch out for updraft and downdraft winds!

SAFETY

Watch for key weather trigger points for extreme fire behavior: **temperatures above 90 degrees + humidity below 25%+ eye level winds above 10 mph** could lead to extreme fire behavior. Monitor weather conditions closely, as local variations could occur. **Watch out for high intensity flare ups in patches of accumulated fuels!**